

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

At page 10, lines 7-15:

The above case is one of the means for strictly disabling the human eye from distinguishing the density difference. It is not always to strictly disable the human eye from distinguishing ~~distinguish~~ the density difference, however. Normally, even if some degree of density is present around a digital image, such density is not offensive to the naked eye. Generally, a density around a digital image, which is 0.1 or less, is not offensive to the eye. Accordingly, no problem arises if the half tone is expressed using a unit of 3 x 3.

At page 10, lines 23-25, and page 11, lines 1-16:

4 is a blank area on the page, and 5 is an area containing additional information which is embedded in the blank area 4 and invisible to the eye or needs a careful watching to see it. An example of the information is storage management information for managing the storage of printed documents. Reference numeral 6 indicates a part of the additional information area illustrated in an enlarged form. As shown, the additional information area is divided every significant block. Numeral 7 indicates the detail of each significant block, and the significant block consists of six significant subblocks 8. To further enlarge the significant subblocks 8 (a group of significant subblocks 8a, 8b, 8c, 8d, 8e, 8f), each subblock consists of pixels of 8 x 8. Reference numerals 9, 9' and 9'' indicate information "1"s embedded ~~embed~~ in the significant block 7. A specific pixel

located substantially at the center of the 8 x 8 matrix of pixels is used as a representative point of the subblock. The determination of whether the subblock is "1" or "0" is based on whether or not the information "1" is embed in the representative point.

At page 12, lines 18-23:

In the printer or copying machine designed so as to print 600 pixels per inch, for example, one character of information embedded using the notation system may be expressed by using an area of 1mm in height and 0.67mm in width. Accordingly, a [[an]] blank area of 1mm in height and 10cm in width will suffice for the embedding of information of 147 characters.

At page 13, lines 12-23:

Fig. 3 shows an example where the invisible information 5 is embedded into a plurality of locations on one page of the document. In the Fig. 3 example, invisible information 5 and 5a are embedded in the upper blank on the page, and invisible information 5b and 5c are embed in the lower blank. The significant blocks 7 may be arranged not only in lateral direction but also in the vertical direction. Accordingly, the invisible information may be embedded on the right and left blanks while being vertically arranged. Those vertically arranged invisible information are denoted as 5d and 5e in the figure. This technique of embedding the invisible information into a plurality of locations will improve ~~improves~~ the reliability.

At page 16, lines 10-18:

Fig. 6 is a diagram showing an algorithm for reading out the invisible information embedded according to the invention. In the figure, reference numeral 41 designates a scanner; 42 is an isolated-point extracting part (e.g., which can extract isolated points); and 43 is a superiority-block cluster detecting part (e.g., which can generate a cluster of significant blocks). In a cluster of a plurality of significant blocks, reference numeral 44 is a pattern decoder part (e.g., which can parity check the significant blocks); 45 is a data decoder part (e.g., which can decode data); 46 is a data-train generator part (e.g., which can generate data trains); 47 is a data-train comparator part (e.g., which can compare the data trains); and 48 is a data defining part (e.g., which can define data).

At page 17, lines 2-4:

Those isolated points are processed by the utilization of a regularity of the pattern to detect a cluster of significant blocks. ["]]

At page 22, lines 3-7:

In Fig. 10, a document 1 is stored in both the PDL format (2211-a) and the dot image format (2211-b). Documents 2 and n are also stored in both the formats (2212-a, 221-a, 2212-b, 2215-a, 2215-b). Documents 3 and N are stored in the PDL format (2213-a, 2216-a). A document 4 is stored in the dot image format (2214-b).